

REMARKS

Formal Matters

Claims 36-39, 57, 78, 82-84, 89-90, 100-101, 105 and 111-119 are pending after entry of the amendments set forth herein.

Claims 36-39, 57, 78, 82-84, 89-90, 100-101 and 105 were examined. Claims 36, 57, 78, 82-84, 89-90, 100-101 and 105 were rejected. Claims 37-39 were allowed.

Applicants respectfully request reconsideration of the application in view of the amendments and remarks made herein.

No new matter has been added.

The Office Action

In the Official Action of August 23, 2005, claims 78, 82-84, 89, 90 and 105 were rejected under 35 U.S.C. Section 102(e) as being anticipated by Gough et al., U.S. Patent No. 5, 863,290. The Examiner asserted that Gough et al. disclose a microwave ablation system comprising an ablation device 16 that includes an introducer 14 with a sharpened distal end and that is sized and dimensioned for slidable receipt of the ablation device therethrough. The Examiner asserted that the previous amendments to the claims “mostly present function language” that the Examiner did not consider to distinguish the claimed invention over Gough et al.

In response thereto, Applicants note that what the Examiner has interpreted in Gough et al. to be an “introducer” is actually disclosed by Gough et al. to be the primary antenna of the ablation system, e.g., see column 4, lines 14-15. The system of Gough et al. is designed to abate a tissue mass, and not to form a lesion along the surface of a tissue, in contrast to the present invention. For this reason, Gough et al. requires a plurality of antennae, including a primary antenna 14 and one or more secondary antennae 16. For example, column 7, lines 48-53 described operation of these multiple antennae to achieve a cylindrical ablation volume. In contrast, the present invention ablates along an inner wall of an organ or duct, as claimed. Further, the introducer does not function as a primary antenna, in contrast to what is disclosed by Gough et al. Accordingly, claim 78 has been amended to recite that the elongated shaft is not connected to a source of ablation energy. It is respectfully submitted that this is a structural limitation that is clearly not met by the disclosure of Gough et al., since the primary antenna 14 of Gough et al. is connected to an ablative energy source.

With regard to claim 82, Applicants disagree that Gough et al. discloses such, contrary to the Examiner's assertion. The antennae 16, 16' shown in Figs. 1-6B, 7, and 8 are all curved and therefore do not extend substantially straight from the distal end at a skewed angle, as is recited in claim 82.

It is respectfully submitted that the remainder of the claims rejected under this ground of rejection are also all allowable over Gough et al. for at least the same reasons provided above with regard to claim 78, since they all depend from claim 78.

In view of the above amendments and remarks, the Examiner is respectfully requested to reconsider and withdraw the rejection of claims 78, 82-84, 89, 90 and 105 under 35 U.S.C. Section 102(e) as being anticipated by Gough et al., U.S. Patent No. 5, 863,290, as being clearly no longer appropriate.

Claims 36, 51, 57, 100 and 101 were rejected under 35 U.S.C. Section 103(a) as being unpatentable over Gough et al., U.S. Patent No. 5, 863,290 in view of Kasevich, U.S. Patent No. 6,233,490. The Examiner asserted that Gough et al. discloses all of the recited features of the rejected claims except for an antenna device comprising a coaxial cable having an inner conductor, outer conductor and a dielectric medium as claimed. The Examiner asserted that it would have been obvious to modify the device of Gough et al. with the teachings of Kasevich, in order to provide an alternate means of microwave energy propagation in the form of microwave antennas connected to the distal end of a coaxial cable in order to serve as a waveguide. However, no reason was given as to why one of ordinary skill in the art would have been motivated to provide such an "alternate" means of microwave energy propagation.

Even if it would have been obvious to combine the references as suggested by the Examiner, which Applicants do not agree that it would have been, the resulting combination would still not meet all of the limitations of the claims as presently amended, since the primary antenna 14 of Gough et al. would be connected to the microwave power waveguide in the Examiner's proposed combination. Thus, neither Gough et al. nor Kasevich, whether taken alone or in any proper combination, disclose, teach or suggest the introducer recited in claim 36, the probe recited in claim 57, or claims 100 and 101, since Gough et al. does not use a probe or introducer to pierce through the wall of an organ or duct and through which an ablation tool is introduced. Rather, Gough et al. directly inserts the ablation antenna 14 into the tissue mass to be ablated.

In view of the above amendments and remarks, Examiner is respectfully requested to reconsider and withdraw the rejection of claims 36,57, 100 and 101 (claim 51 having been canceled) under 35 U.S.C. Section 103(a) as being unpatentable over Gough et al., U.S. Patent No. 5, 863,290 in view of

Kasevich, U.S. Patent No. 6,233,49078, 82-84, 89, 90 and 105 under 35 U.S.C. Section 102(e) as being anticipated by Gough et al., U.S. Patent No. 5, 863,290, as being clearly no longer appropriate.

It is further respectfully submitted that new claims 111-119 also patentably define over the art of record. Claims 11 and 112 depend from claim 78 and it is respectfully submitted that these claims are allowable for at least the reasons provided above with regard to claim 78. Further, claim 111 recites an antenna enclosure encapsulating at least a portion of said pre-shaped elongated energy delivery portion. Claim 112 further defines the antenna enclosure of claim 111, as comprising a dielectric material.

Claim 113 is a new independent claim reciting an ablation system for ablating an interior tissue region of an organ or duct within a body of a patient, said system comprising: a probe configured to penetrate a wall of the organ or duct, but not to deliver ablation energy, the probe having a proximal end portion and a distal end portion having a sharpened distal end; and an ablation tool configured to be slidably passed within said probe, said ablation tool comprising an ablation element at a distal end thereof and an ablation energy supply line connected proximally to said ablation element, said ablation element having a first, substantially straight configuration assumed when being passed through said probe, and a second, bent configuration assumed when said ablation element extends distally from said distal end of said probe. It is respectfully submitted that neither Gough et al. nor Kasevich, nor any other art of record, whether taken alone or in any proper combination, discloses, teaches or suggest the invention as recited in claim 113.

Claims 114-119 depend from claim 113 and it is therefore respectfully submitted that these claims are also allowable for at least the same reasons that claim 113 is allowable. Further, claim 114 recites that said ablation element, in said bent configuration, comprises two straight portions interconnected by an angled portion, which is clearly neither disclosed or suggested by Gough et al. or Kasevich. Claim 115 recites that said ablation element comprises a microwave antenna. Claim 116 recites that said probe and said ablation tool are independent components and wherein said ablation tool can be completely removed from within said probe, which is not the case with either Gough et al. or Kasevich. Claim 117 recites that said ablation tool and probe are integrally provided within said system. Claim 118 further recites a handle proximally connected to said probe, and wherein longitudinal sliding of said ablation tool within said probe is facilitated via said handle. Claim 119 further recites a biasing member configured to bias said ablation element from said substantially straight configuration to said bent configuration, a feature which is neither disclosed nor taught by Gough et al. or Kasevich.

Conclusion

Applicants submit that all of the claims are in condition for allowance, which action is requested. If the Examiner finds that a telephone conference would expedite the prosecution of this application, please telephone the undersigned at the number provided.

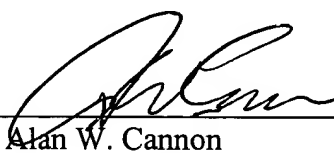
The Commissioner is hereby authorized to charge any underpayment of fees associated with this communication, including any necessary fees for extensions of time, or credit any overpayment to Deposit Account No. 50-2653, order number GUID-118.

Respectfully submitted,
LAW OFFICE OF ALAN W. CANNON

Date: _____

12/21/08

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